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A CASE STUDY REGARDING THE ONGOING DIALOGUE BETWEEN THE FEDERAL CIRCUIT AND THE SUPREME COURT: THE FEDERAL CIRCUIT'S IMPLEMENTATION OF *KSR v. TELEFLEX*

Thomas G. Hungar*
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INTRODUCTION

FOR much of its existence, the Federal Circuit was largely left alone to chart the evolution of patent law, with little or no effective review by the Supreme Court.¹ But as many commentators have noted, that era of relative neglect by the Supreme Court is behind us, as the Supreme Court has increasingly reviewed—and frequently disagreed with—the Federal Circuit's patent-law decisions in the past decade.² The Supreme Court's newfound interest in patent law has prompted a range of reactions (many of them unfavorable) from participants in the patent system, including commentators, patent lawyers, and the Federal Circuit

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1. See John F. Duffy, *The Festo Decision and the Return of the Supreme Court to the Bar of Patents*, 2002 SUP. CT. REV. 273, 276–77 (2002).

2. In the past decade, the Supreme Court has disagreed with the Federal Circuit's legal analysis in numerous cases. See *Ass'n for Molecular Pathology v. Myriad Genetics*, 133 S. Ct. 2017 (2013); *Caraco Pharm. Labs., Ltd. v. Novo Nordisk A/S*, 132 S. Ct. 1670 (2012); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2011); *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060 (2011); *Bilski v. Kappos*, 130 S. Ct. 3218 (2010); *Quanta Comp., Inc. v. LG Elec., Inc.*, 553 U.S. 617 (2008); *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007); *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437 (2007); *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118 (2007); *eBay, Inc. v. MercExchange LLC*, 547 U.S. 28 (2006); *Merck KGaA v. Integra LifeSciences I, Ltd.*, 545 U.S. 193 (2005); *Festo Corp. v. Shoketsu Kinzoki Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722 (2002). It has agreed with the Federal Circuit's legal analysis in several other cases. See *Bowman v. Monsanto Co.*, 133 S. Ct. 1761 (2013); *Kappos v. Hyatt*, 132 S. Ct. 1690 (2012); *Bd. of Trustees of Leland Stanford Junior Univ. v. Roche Molecular Sys., Inc.* 131 S. Ct. 2188 (2011); *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238 (2011).

judges themselves.³ Chief Judge Rader has described the perception of a “culture clash” between the Federal Circuit and Supreme Court, with the former preferring rules and the latter favoring discretion.⁴

Given the relatively unfettered authority to resolve important questions of patent law that the Federal Circuit has enjoyed until recent years, combined with the less-than-favorable reviews greeting the Supreme Court’s recently enhanced role in such cases, one might expect the Federal Circuit to take steps to minimize the impact of the Supreme Court’s incursions into patent law—not by brazenly disobeying Supreme Court precedent, of course, but perhaps by subtly limiting the precedent’s reach and negating its implications. While a complete analysis of this question would require comprehensive evaluation of the extent to which the Federal Circuit has fully implemented all of the Supreme Court’s twenty-first century patent-law precedents, a task well beyond the scope of this paper, we have taken a first step in that direction by examining the Federal Circuit’s response to the Supreme Court’s 2007 foray into the law of obviousness in *KSR International Co. v. Teleflex, Inc.*⁵

KSR marked the Supreme Court’s first substantive pronouncement on the law of obviousness in more than thirty years. The Court’s decision rejected the rigid “teaching, suggestion, motivation” test for obviousness that had come to prevail in the Federal Circuit during that period. The rejection of so entrenched a doctrine is bound to prompt a vigorous response one way or another. Roughly six years have passed since *KSR* was decided, providing us a meaningful opportunity to analyze that response. We conclude that the Federal Circuit has indeed implemented *KSR* in substantial respects, but not fully, such that *KSR* still holds potential for further change in the law of obviousness. The Federal Circuit’s response to *KSR* also helps illustrate the culture clash described by Chief Judge Rader. The Supreme Court in *KSR* stressed the need for flexibility and discretion, but the Federal Circuit responded in part by attempting to craft rules that simplify decision making and, at least in theory, provide

3. (Former) Judge Gajarsa has stated that patent law rules must “be clear, concise and in some cases rigid. The Supreme Court does not like rigid.” Erin Geiger Smith, *Ex-Federal Circuit Judge Sees Patent Tensions with Supreme Court*, THOMSON REUTERS (Mar. 14, 2013), http://newsandinsight.thomsonreuters.com/Legal/News/2013/03_-_March/Ex-Federal_Circuit_judge_sees_patent_tensions_with_Supreme_Court/. Judge Rader has said, “The problem is that the Supreme Court is not putting the language of the statute in the proper context.” Ryan Davis, *Rader Calls Out High Court’s ‘Activism’ In IP Law*, LAW360 (Jan. 22, 2013, 8:11 PM), <http://www.law360.com/articles/408846/rader-calls-out-high-court-s-activism-in-ip-law>. By contrast, Judge Dyk has stated that “[h]ostility to Supreme Court review is, in my view, misguided.” Timothy B. Dyk, *Does the Supreme Court Still Matter?*, 57 AM. U. L. REV. 763, 763 (2007); see also Paul R. Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, 100 GEO. L.J. 1437, 1441 (2012); Peter Lee, *Patent Law and the Two Cultures*, 120 YALE L.J. 2 (2010); Gene Quinn, *Killing Industry: The Supreme Court Blows Mayo v. Prometheus* (Mar. 20, 2012, 1:44 PM), <http://www.ipwatchdog.com/2012/03/20/supreme-court-mayo-v-prometheus/id=22920/>.

4. Gene Quinn, *Chief Judge Rader on the Supreme Court and Judge Posner*, IPWATCHDOG (Mar. 17, 2013, 12:07 PM), <http://www.ipwatchdog.com/2013/03/17/chief-judge-rader-on-the-supreme-court-and-judge-posner/id=37620/>.

5. 550 U.S. 398 (2007).

predictability. Ultimately though, that aspect of the Federal Circuit's response to *KSR* is likely self-defeating.

The Article is organized as follows: Part I offers a brief sketch of the obviousness doctrine through *KSR*. Part II examines the many respects in which the Federal Circuit has implemented *KSR* in accordance with the Supreme Court's guidance. Part III discusses the remaining respects in which the Federal Circuit has yet to fully implement *KSR*. Part IV summarizes our conclusions.

I. OBVIOUSNESS THROUGH *KSR*

Section 103 of the Patent Act makes a claimed invention obvious and hence unpatentable "if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains."⁶ The Supreme Court explained in *Graham v. John Deere Co. of Kansas City* that the determination of obviousness involves a question of law, but rests on several factual inquiries:

[T]he scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized. . . .⁷

Between *Graham* and *KSR*, the Federal Circuit developed its "teaching, suggestion, or motivation" (TSM) test to provide a relatively bright-line rule that would facilitate resolution of obviousness questions. Under that test, a patent would be deemed obvious only if there existed "some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination."⁸ The court often applied the test rigidly. For example, the lack of a specific teaching, suggestion, or motivation in the prior art could not "be remedied" by "general conclusions about what is 'basic knowledge' or 'common sense' to one of ordinary skill in the art."⁹ Similarly, the court would reject arguments that "one of ordinary skill in the art would have been motivated to combine the references" in the absence of "specific findings of fact" to that effect.¹⁰ After the Supreme Court granted certiorari in *KSR*, the Federal Circuit attempted to ameliorate some of the rigidity of its test, refining it to include "consideration of common

6. 35 U.S.C. § 103 (2006).

7. 383 U.S. 1, 17 (1966).

8. *In re Oetiker*, 977 F.2d 1443, 1447 (Fed. Cir. 1992).

9. *See In re Zurko*, 258 F.3d 1379, 1385 (Fed. Cir. 2001).

10. *See In re Dembiczak*, 175 F.3d 994, 1001-02 (Fed. Cir. 1999).

knowledge and common sense.”¹¹

KSR rejected the Federal Circuit’s application of a rigid TSM test.¹² In the Supreme Court’s view, the obviousness inquiry could not “be confined by a formalistic conception of the words teaching, suggestion, and motivation.”¹³ To the contrary, “[t]he diversity of inventive pursuits and of modern technology counsels against limiting the analysis in this way.”¹⁴ Along the way, the Court pointed out that the Federal Circuit had erred by “deny[ing] recourse to common sense”¹⁵ in assuming “that a person of ordinary skill attempting to solve a problem will be led only to those elements of the prior art designed to solve the same problem,”¹⁶ and by concluding “that a patent claim cannot be proved obvious merely by showing that the combination was obvious to try.”¹⁷ *KSR* also reaffirmed the “expansive and flexible” approach to obviousness laid out in *Graham*.¹⁸ The Court explained that “[a] person of ordinary skill is also a person of ordinary creativity, not an automaton”;¹⁹ that “[w]hen a work is available in one field, design incentives and other market forces can prompt variations of it”;²⁰ and that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”²¹

II. THE FEDERAL CIRCUIT’S RESPONSE TO *KSR*

Facing criticism for its “constricted analysis,”²² “rigid approach,”²³ and “narrow conception of the obviousness inquiry,”²⁴ the Federal Circuit has sought to expand the obviousness inquiry. It has done so primarily by adding flexibility to the TSM test and finding obvious the predictable use of prior art elements according to their established functions.

A. THE FLEXIBLE TSM TEST

The Supreme Court clearly rejected a rigid TSM test,²⁵ but left it for the Federal Circuit to decide whether a more flexible version of a TSM test could still be useful in helping guide (without controlling all aspects of) the obviousness inquiry.²⁶ The Federal Circuit has answered that

11. *Dystar Textilfarben GmbH v. C.H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006).

12. *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 415 (2007).

13. *Id.* at 419.

14. *Id.*

15. *Id.* at 421.

16. *Id.*

17. *Id.* at 421 (internal quotation and citation omitted).

18. *Id.* at 415; see *supra* text accompanying note 7.

19. *KSR*, 550 U.S. at 421.

20. *Id.* at 417.

21. *Id.* at 416.

22. *Id.* at 421.

23. *Id.* at 415.

24. *Id.* at 419.

25. *Id.* at 415.

26. *Id.* at 418.

question affirmatively. In adhering to a more-flexible version of the TSM test, the Federal Circuit has seized on the Supreme Court's observations that the TSM test "captured a helpful insight"²⁷ and that "it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does."²⁸

The modified TSM test is properly flexible in the Federal Circuit's view because it draws on the expanded sources discussed in *KSR*: market forces; design incentives; the "interrelated teachings of multiple patents"; "any need or problem known in the field of endeavor at the time of invention and addressed by the patent"; and the background knowledge, creativity, and common sense of the person of ordinary skill.²⁹

Unlike the rigid TSM test followed before *KSR*, under the modified version of the TSM test, "teaching, suggestions, or motivations need not always be written references."³⁰ The Federal Circuit has therefore drawn on the following principles of *KSR* in relaxing and broadening the TSM test: common sense, rehabilitating the person of ordinary skill, looking beyond the problem the patentee tried to solve, design incentives and market forces, scope of relevant prior art, and the combination of familiar elements yielding predictable results.

B. COMMON SENSE

In *KSR* the Supreme Court explained that the rigid TSM test "den[ied] factfinders recourse to common sense."³¹ The Federal Circuit has since acknowledged that "common sense can be a source of the reasons to combine or modify prior art to achieve the patented invention."³² Under the modified TSM test, then, a patented invention is obvious when "it is simply a matter of common sense" to combine prior art elements "in order to address the known problem" at issue.³³ For example, when a "known procedure" for bulk email delivery successfully delivers 95% of emails, "common sense dictates" that one should repeat the procedure

27. *Id.* at 419; *see also* *Takeda Chem. Indus. v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 1357 (Fed. Cir. 2007) ("As long as the test is not applied as a 'rigid and mandatory' formula, that test can provide 'helpful insight' to an obviousness inquiry.") (quoting *KSR*, 550 U.S. at 401).

28. *KSR*, 550 U.S. at 418; *see also* *Hearing Components v. Shure, Inc.*, 600 F.3d 1357, 1374 (Fed. Cir. 2010) ("[I]t may nevertheless be 'important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the new invention does.'") (quoting *KSR*, 550 U.S. at 418).

29. *Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1329 (Fed. Cir. 2009).

30. *Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc.*, 520 F.3d 1358, 1365 (Fed. Cir. 2008).

31. *KSR*, 550 U.S. at 421.

32. *Perfect Web Techs., Inc.*, 587 F.3d at 1328; *see also* *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1240 (Fed. Cir. 2010) ("Thus, in appropriate cases, the ultimate inference as to the existence of a motivation to combine references may boil down to a question of 'common sense,' appropriate for resolution on summary judgment or JMOL.").

33. *Wyers*, 616 F.3d. at 1241.

“until success is achieved.”³⁴

C. REHABILITATING THE PERSON OF ORDINARY SKILL

KSR rejected the Federal Circuit’s narrow understanding of the person of ordinary skill, instead describing that hypothetical individual as “a person of ordinary creativity, not an automaton.”³⁵ Moreover, the Supreme Court made clear that such persons will not “be led only to those elements of the prior art designed to solve the same problem.”³⁶ Pursuant to this guidance from the Supreme Court, the Federal Circuit has acknowledged that the person of ordinary skill can close a “relatively small logical gap between the prior art and the claim” at issue.³⁷

D. LOOKING BEYOND THE PROBLEM THE PATENTEE TRIED TO SOLVE

KSR held that the Federal Circuit erred by “holding that courts and patent examiners should look only to the problem the patentee was trying to solve.”³⁸ As a result, the Federal Circuit has subsequently recognized that any known problem can provide a reason to combine prior art elements to form the claimed invention—“[t]his includes, but is not limited to, the problem motivating the patentee.”³⁹ Consequently, in rejecting an argument that “the problem listed in the patent was insufficient motivation,” the Federal Circuit looked beyond the patent to “evidence of known problems and an obvious solution.”⁴⁰

E. DESIGN INCENTIVES AND MARKET FORCES

KSR noted that “[w]hen a work is available in one field, design incentives and other market forces can prompt variations of it.”⁴¹ Thus, in *Muniauction, Inc. v. Thomson Corp.*, the Federal Circuit held that a speech “address[ing] the desirability” of the claimed combination expressed “demands known to the design community,” and therefore “indicat[ed] the obviousness of the claimed combination.”⁴²

F. SCOPE OF RELEVANT PRIOR ART

KSR rejected the Federal Circuit’s “assumption that a person of ordinary skill attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem.”⁴³ Post-*KSR* decisions of the Federal Circuit have thus reinvigorated a line of pre-*KSR* precedent

34. *Perfect Web Techs., Inc.*, 587 F.3d at 1330.

35. *KSR*, 550 U.S. at 421.

36. *Id.* at 420.

37. *Scanner Techs. Corp. v. ICOS Vision Sys.*, 528 F.3d 1365, 1382 (Fed. Cir. 2008).

38. *KSR*, 550 U.S. at 420.

39. *Norgren Inc. v. Int’l Trade Comm’n*, 699 F.3d 1317, 1323 (Fed. Cir. 2012).

40. *Id.* at 1327.

41. *KSR*, 550 U.S. at 417.

42. 532 F.3d 1318, 1326 (Fed. Cir. 2008).

43. *KSR*, 550 U.S. at 420.

stating that prior art is relevant if it is either “from the same field of endeavor, regardless of the problem addressed” or “not within the field of the inventor’s endeavor” but “reasonably pertinent to the particular problem with which the inventor is involved.”⁴⁴ To be sure, *KSR*’s observation that a “person of ordinary skill often will be able to fit the teachings of multiple patents together like pieces of a puzzle” suggests an even broader scope for relevant prior art than that expressed in the Federal Circuit’s post-*KSR* test.⁴⁵ In most cases, however, the Federal Circuit’s application of the test does not appear to be unduly limiting. For example, that court has considered prior art concerning folding beds relevant to a claim for a folding treadmill.⁴⁶

In all these respects, the Federal Circuit has looked to *KSR* to inject flexibility into the TSM test without—for the most part—reviving elements of the rigid TSM test.⁴⁷ Moreover, the flexible TSM test appears to be the dominant method of analysis post-*KSR*, suggesting that the Federal Circuit has not seen *KSR* as a drastic change to obviousness analysis.⁴⁸ In most cases, the inquiry is broader, but structurally similar to the pre-*KSR* inquiry.

G. THE COMBINATION OF FAMILIAR ELEMENTS YIELDING PREDICTABLE RESULTS

The Federal Circuit has also frequently given effect to another aspect of *KSR*, namely, its reinvigoration of a pair of Supreme Court precedents—*Anderson’s Black-Rock, Inc. v. Pavement Salvage Co.*⁴⁹ and *Sakraida v. Ag Pro, Inc.*⁵⁰—that had fallen into disuse in the Federal Circuit. These cases stand for the proposition that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”⁵¹ In *KSR*, the Court explained that these cases “are illustrative—a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.”⁵²

After *KSR*, the Federal Circuit has begun to ask this question. For instance, in *Agrizap, Inc. v. Woodstream Corp.*, the “asserted claims [for an electronic rat and mouse trap] simply substitute[d] a resistive electrical

44. *Comaper Corp. v. Antec, Inc.*, 596 F.3d 1343, 1351 (Fed. Cir. 2010) (quoting *In re Clay*, 966 F.2d 656, 658–59 (Fed. Cir. 1993)).

45. *KSR*, 550 U.S. at 402.

46. See *In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379–80 (Fed. Cir. 2007).

47. But see *infra* Part III.A.

48. See Emer Simic, *The TSM Test is Dead! Long Live the TSM Test! The Aftermath of KSR, What was all the Fuss About?*, 37 APIPLA Q.J. 227, 230 (2009); Jason Rantanen, *The Federal Circuit’s New Obviousness Jurisprudence: An Empirical Study* 61 (U. Iowa Legal Studies Research Paper No. 13-9, 2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2210049.

49. 396 U.S. 57 (1969).

50. 425 U.S. 273 (1976).

51. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007).

52. *Id.* at 417.

switch for the mechanical pressure switch employed by the Gopher Zapper [another aptly-named apparatus for electrocuting pests].”⁵³ Consequently, the Federal Circuit explained that this was “a textbook case of when the asserted claims involve a combination of familiar elements according to known methods that does no more than yield predictable results.”⁵⁴ Similarly, in *Leapfrog Enterprises, Inc. v. Fisher-Price, Inc.*, the Federal Circuit held obvious a claim that simply updated the mechanical components of a toy with electronic components.⁵⁵

When the court applies the *Sakraida* principle, it does so forcefully. To avoid a holding of obviousness notwithstanding this principle, the patentee usually must show an unexpected result or teaching away. As the Federal Circuit has explained, the “predictable result” described in *KSR* refers to the expectation “that the combination would have worked for its intended purpose The opposite conclusion would follow, however, if the prior art indicated that the invention would not have worked for its intended purpose or otherwise taught away from the invention.”⁵⁶

As applied by the Federal Circuit, the principle articulated in *Sakraida* and *Anderson’s Black-Rock* is distinct from the flexible TSM test and provides an alternative method of establishing that a claimed invention is obvious. For instance, the Federal Circuit did not look to the flexible TSM test for guidance in *Agrizap* or *Leapfrog Enterprises*. Even so, the court applies the *Sakraida* principle relatively infrequently. As these examples illustrate, thus far it appears that the Federal Circuit has applied it primarily in certain types of cases: when a patent simply “accommodate[s] a prior art mechanical device . . . to modern electronics,”⁵⁷ or “adapt[s] existing electronic processes to incorporate modern internet and web browser technology.”⁵⁸ It is unlikely, by contrast, that chemical compounds are ever the predictable use of prior art elements according to their established functions.⁵⁹

III. THE UNFULFILLED ASPECTS OF *KSR*

As the foregoing overview demonstrates, in numerous respects the Federal Circuit has sought to introduce into the obviousness analysis the flexibility required by *KSR*. There can be no doubt that the inquiry is more flexible than before and that the Federal Circuit has made substantial strides in seeking to incorporate the teachings of *KSR* into its obviousness jurisprudence. Nonetheless, our review suggests that the Federal

53. 520 F.3d 1337, 1344 (Fed. Cir. 2008).

54. *Id.*

55. 485 F.3d 1157, 1162 (Fed. Cir. 2007).

56. *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1326 (Fed. Cir. 2009).

57. *Leapfrog Enters.*, 485 F.3d at 1161.

58. *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1327 (Fed. Cir. 2008).

59. *See, e.g., Takeda Chem. Indus. v. Alphapharm Pty.*, 492 F.3d 1350, 1357 (Fed. Cir. 2007) (“[I]t remains necessary to identify some reason that would have led a chemist to modify a known compound in a particular manner to establish prima facie obviousness of a new claimed compound.”).

Circuit has not yet fully implemented the logical implications of the Supreme Court's reasoning and holding in *KSR*. In particular, the Federal Circuit's post-*KSR* decisions have not yet given full effect to *KSR* in three respects: First, the Federal Circuit has sometimes treated the flexible TSM test as necessary rather than as sufficient for establishing obviousness; second, the court has imposed the flexible TSM test on the distinct obvious-to-try doctrine; and third, the court has thus far failed to recognize the full implications of the Supreme Court's elaboration of the principle that obviousness is a question of law for the court.

A. TREATING THE FLEXIBLE TSM TEST AS NECESSARY TO ESTABLISHING OBVIOUSNESS

Notwithstanding the guidance provided by the Supreme Court in *KSR*, at times the Federal Circuit has treated its modified version of the flexible TSM test as the sole means for establishing obviousness, instead of as simply one helpful means of analyzing the obviousness inquiry. Thus, in some cases the court has required a defendant "to present evidence that one of ordinary skill in the art at the time of the invention would have been motivated or found reason" to modify the prior art in the manner claimed as a prerequisite to establishing obviousness.⁶⁰ It has also referred to the "*requisite* motivation or suggestion to modify,"⁶¹ and it has explained that "some kind of motivation *must be shown* from some source, so that the jury can understand why a person of ordinary skill would have thought of either combining two or more references or modifying one to achieve the patented method."⁶²

As this last statement suggests, the flexible TSM test has developed into the Federal Circuit's primary (and sometimes exclusive) way of implementing the nonobviousness requirement of § 103. Indeed, the court had originally crafted the rigid TSM test "to resolve the question of obviousness with more uniformity and consistency."⁶³ And (at least at times) it continues to strive for uniformity and consistency by mandating application of the flexible TSM test. For the Federal Circuit, asking whether a combination would have been obvious to a person of ordinary skill is too vague to serve as a rule of law. And so it has sought to make the obviousness inquiry more rule-like and simpler to apply by requiring proof of a reason to combine prior art references. While it is beyond dispute that showing a reason to combine should suffice to establish *prima facie* obvi-

60. *Amkor Tech., Inc. v. Int'l Trade Comm'n*, 692 F.3d 1250, 1261 (Fed. Cir. 2012).

61. *Takeda*, 492 F.3d at 1356 (emphasis added).

62. *Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1374 (Fed. Cir. 2008) (emphasis added); *see also* *Rentrop v. Spectranetics Corp.*, 550 F.3d 1112, 1118 (Fed. Cir. 2008) (affirming jury instruction that there "must have been a motivation or suggestion to combine," but that "[t]he motivation may arise from common knowledge, or common sense of the person of ordinary skill in the art, without any specific hint or suggestion in a particular reference").

63. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007).

ousness, requiring such proof as a mandatory prerequisite creates certain difficulties and problems.

In the first place, if the flexible TSM test is treated as the only permissible method for establishing obviousness, the Federal Circuit will have repeated its mistake in adopting the rigid TSM test by departing from the flexibility mandated by *Graham* and *KSR*. When a court implements a broad legal standard with rules, it may well impose predictability, but at the cost of "mild substantive distortion" of the underlying legal standard.⁶⁴ This distortion may be proper when the underlying legal principle is "too vague to serve directly as [an] effective rule[] of law," but the Supreme Court has rejected the idea that § 103 is too vague to serve directly as an effective rule of law.⁶⁵ In *Graham*, the Court noted the "difficulties in applying the nonobvious test," but found them "comparable to those encountered daily by the courts in such frames of reference as negligence and scienter, and should be amenable to case-by-case development."⁶⁶ And *KSR* rejected the Federal Circuit's attempt to "resolve the question of obviousness with more uniformity and consistency,"⁶⁷ opting instead for the more "expansive and flexible approach"⁶⁸ set forth in *Graham*. That the TSM test is now more flexible, in that the Federal Circuit has expanded the permissible means of showing a motivation (or reason) to combine, does not resolve the underlying problem if the modified test continues to operate as the sole test for obviousness. In that case, the obviousness inquiry is not as flexible as *Graham* and the broad language that § 103 contemplates.

Moreover, requiring a reason to combine as a prerequisite to an obviousness determination creates a substantial risk that Federal Circuit panels will periodically relapse into applying what amounts to the equivalent of the rigid TSM test rejected in *KSR*. Although such cases are likely to be infrequent, there is reason to believe that they do exist. Consider, for example, *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*⁶⁹ where it was well-known in the field that using heaters to dry tobacco leaves in a barn produced undesirable chemical compounds.⁷⁰ This cheaper method of curing emerged in the 1970s and took place in "direct-fired barns," where combustion exhaust was mixed with the curing tobacco.⁷¹ Prior to the 1970s, tobacco was cured in "indirect-fired barns," where the tobacco was separated from the combustion exhaust.⁷² It was further known that anaerobic conditions created by combustion gases

64. Antonin Scalia, *The Rule of Law as a Law of Rules*, 56 U. CHI. L. REV. 1175, 1178 (1989).

65. Richard H. Fallon, Jr., *Foreword: Implementing the Constitution*, 111 HARV. L. REV. 54, 62 (1997).

66. *Graham v. John Deere Co.*, 383 U.S. 1, 18 (1966).

67. 550 U.S. at 407.

68. *Id.* at 415.

69. 655 F.3d 1364 (Fed. Cir. 2011).

70. *Id.* at 1367.

71. *Id.*

72. *Id.*

from the heaters produced those compounds.⁷³ The claimed patent sought to solve this problem by eliminating combustion gases and controlling for humidity, temperature, and airflow.⁷⁴ One piece of prior art—an article—taught that certain humidity, temperature, and oxygen levels may produce the compounds.⁷⁵ Another—a Japanese patent—taught that increased air flow reduced combustion gases and resulted in better-smelling tobacco.⁷⁶

A jury found the claimed patent obvious and the district court rejected the patentee's post-verdict motion for judgment as a matter of law.⁷⁷ Nonetheless, the Federal Circuit held that the patent was nonobvious on the ground that "the record contain[ed] no evidence suggesting a motivation to combine" the prior art references.⁷⁸ In the panel's view, the article teaching that certain humidity, temperature, and oxygen levels may produce the compounds contained only "speculative and tentative disclosure of what 'might' or 'may' lead to" the production of the undesirable compounds, and therefore did not "sufficiently direct or instruct one of skill in this art."⁷⁹ The Japanese patent teaching that increased airflow reduced combustion gases and resulted in better-smelling tobacco did "not mention" the compounds and did not provide a "link between the oxygen levels (inherent in increasing air flow)" and production of the compounds.⁸⁰ Neither specifically taught how to eliminate combustion gases.⁸¹ The panel therefore upheld the patent, even though it was known in the field that the shift from indirect-fired barns to direct-fired barns meant that, for the first time, tobacco was exposed to combustion gases that produced the compound.⁸²

KSR suggests a different outcome. The patentee "fit the teachings of multiple patents together like pieces of a puzzle" to solve a known problem.⁸³ In particular, because it was known that combustion gases produced anaerobic conditions, which in turn produced the undesirable compounds, it should not have mattered that neither piece of prior art explicitly taught the elimination of combustion gases. Nor should it have mattered that the Japanese patent teaching that increased airflow reduced combustion gases failed to mention the undesirable compounds. It was already known that deficient oxygen levels produced the compounds, and the prior art taught that increased airflow (which necessarily increases oxygen levels) reduced the combustion gases that led to the undesirable results. Finally, to ignore the article teaching that certain humidity,

73. *Id.*

74. *Id.* at 1368.

75. *Id.* at 1375.

76. *Id.* at 1376.

77. *Id.* at 1371.

78. *Id.* at 1376.

79. *Id.*

80. *Id.*

81. *Id.*

82. *Id.* at 1367.

83. *KSR*, 550 U.S. at 420.

temperature, and oxygen levels might produce the compound simply because the article did not sufficiently direct or instruct a person of ordinary skill is reminiscent of the rigidity that *KSR* rejected. Yet the Federal Circuit held to the contrary; its reasoning flowing from the requirement that “the fact-finder must not only determine what the prior art teaches, but . . . whether there is a motivation to combine teachings from separate references.”⁸⁴

No doubt the impetus for a decision like *Star Scientific*, as for the rigid TSM test itself, was the desire to adhere to objective rules that provide clear guidance in resolving obviousness questions. But faithful application of *KSR*, while it would preclude insistence on any version of the TSM test as the exclusive means of proving obviousness, does not require courts to reject predictability altogether. Nor does a more rigid approach guarantee predictability. And under the Federal Circuit’s current jurisprudence, litigants cannot readily predict when the Federal Circuit will require a reason to combine and when it will not.⁸⁵ Under a flexible, fact-specific obviousness inquiry, however, additional general principles will emerge over time from reasoned opinions,⁸⁶ just as greater clarity has arisen when the Federal Circuit sought to implement other aspects of the *KSR* decision, such as the *Sakraida* principle. As precedent gathers, patterns emerge. That the Federal Circuit has exclusive appellate jurisdiction over all obviousness cases⁸⁷ should only foster the development of clear principles over time by minimizing the risk of inconsistent outcomes—that is, if the Federal Circuit is not overly deferential to jury verdicts.⁸⁸

Of course, the Federal Circuit may still look for a reason to combine elements of the prior art. But it is one thing to do so while acknowledging that “[t]here is no single way to define the line between true inventiveness on the one hand (which is patentable) and the application of common sense and ordinary skill to solve a problem on the other hand (which is not patentable).”⁸⁹ It is quite another to do so while requiring that “some kind of motivation must be shown from some source, so that the jury can understand why a person of ordinary skill would have thought of either combining two or more references or modifying one to achieve the patented method.”⁹⁰ Until the former view prevails consistently in the Federal Circuit, the full import of *KSR* will not be realized.

84. *Star Scientific*, 655 F.3d at 1374–75.

85. *Compare id.* at 1374–75, with *Leapfrog Enters. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007).

86. Harlan F. Stone, *The Common Law in the United States*, 50 HARV. L. REV. 4, 6 (1936).

87. 28 U.S.C. § 1295(a) (2006); *cf.* Scalia, *supra* note 64, at 1178 (“The common-law, discretion conferring approach is ill suited, moreover, to a legal system in which the supreme court can review only an insignificant portion of the decided cases.”).

88. *See infra* Part III.C.

89. Northern District of California Model Patent Jury Instructions 37 (2011), available at <http://www.cand.uscourts.gov/juryinstructions>.

90. *Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1374 (Fed. Cir. 2008).

B. ENGRAFTING THE FLEXIBLE TSM TEST ONTO THE
OBVIOUS-TO-TRY DOCTRINE

Another area in which the Federal Circuit has yet to give full sway to the teachings of *KSR* involves the obvious-to-try doctrine. *KSR* revived that previously discredited doctrine, holding that “the fact that a combination was obvious to try might show that it was obvious under § 103.”⁹¹ As articulated in *KSR*, this method of proving obviousness is distinct from the flexible TSM test because it does not require a reason to combine prior art references in the specific manner claimed; rather, it requires only a general “design need or market pressure to solve a problem” when “there are a finite number of identified, predictable solutions.”⁹² Yet the Federal Circuit appears to have collapsed the obvious-to-try doctrine into its flexible TSM test, undercutting the *KSR* Court’s recognition that these two approaches provide separate (although no doubt partially overlapping) methods of establishing obviousness.

Initially, the Federal Circuit acknowledged that inventions that were obvious-to-try could be obvious unless (1) the patentee had to “vary all parameters or try each of numerous possible choices . . . where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful,” or (2) the patentee had to “explore a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it.”⁹³ Later, the Federal Circuit rejected the obvious-to-try doctrine as a means for proving obviousness.⁹⁴ And thus, by the time of *KSR*, “[o]bvious to try ha[d] long been held not to constitute obviousness.”⁹⁵

In *KSR*, the Supreme Court rejected the Federal Circuit’s holding “that a patent claim cannot be proved obvious merely by showing that the combination of elements was obvious to try.”⁹⁶ It further laid out the boundaries of the doctrine:

When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.⁹⁷

Contrary to the Federal Circuit’s previous warning that “[m]ore is needed” than a “general motivation” to try,⁹⁸ *KSR* made clear that a gen-

91. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007).

92. *Id.*

93. *In re O’Farrell*, 853 F.2d 894, 903 (Fed. Cir. 1988).

94. *See In re Deuel*, 51 F.3d 1552, 1559 (Fed. Cir. 1995).

95. *KSR*, 550 U.S. at 414 (internal quotation marks and citation omitted).

96. *Id.* at 421 (internal quotation marks and citation omitted).

97. *Id.*

98. *In re Deuel*, 51 F.3d at 1558.

eral design need or market pressure suffices to justify an obviousness finding when a claimed invention was obvious-to-try.⁹⁹ For this reason, the obvious-to-try doctrine is distinct from the flexible TSM test. The latter test requires a reason to combine elements of the prior art "*in the way the claimed new invention does*."¹⁰⁰ The obvious-to-try doctrine, by contrast, requires only a general design need or market pressure to solve a known problem for which there are a finite number of identified possible solutions. Under *KSR*, no distinct motivation or "reason to combine" is needed for the ultimately successful option.

But post-*KSR*, the Federal Circuit has reshaped the obvious-to-try doctrine to be little different from the flexible TSM test itself. For example, the court has held that the doctrine does not apply "when the inventor would have had to try all possibilities in a field unreduced by direction of the prior art."¹⁰¹ Certainly that may be true when the number of "all possibilities" is vast or unknown, but there is no basis under the test articulated in *KSR* for a finding of nonobviousness when there is a limited number of possible solutions and it is predictable that one of them will achieve the desired goal, even if the prior art does not provide guidance about which one. Second, and even more problematic, the Federal Circuit has held that a claimed invention cannot be obvious-to-try when "vague prior art does not guide an inventor toward a particular solution."¹⁰² The court expressed the view that this latter limitation "expresses the same idea as the *KSR* requirement that the identified solutions be 'predictable.'"¹⁰³ But there is nothing in *KSR*'s statement of the test suggesting that the prior art must point to a "*particular*" way of solving the problem; rather, *KSR* requires only that it be predictable that *one* of the known options be likely to solve the problem. If the prior art points to a "particular" solution as likely to succeed, there is no need for the obvious-to-try doctrine because the flexible TSM test itself would lead to a finding of obviousness.

The Federal Circuit's decision in *Rolls-Royce, PLC v. United Technologies Corp.* illustrates this concern.¹⁰⁴ That case involved the fan blades on the turbine of a jet engine¹⁰⁵ and the known problem of shockwaves that increase engine noise and cause inefficiencies.¹⁰⁶ The prior art generally taught "to sweep [fan] blades either rearward or forward" to reduce shockwaves.¹⁰⁷ It also generally taught that the sweep could be varied in three regions of the blade: the inner, the intermediate, and the outer re-

99. *KSR*, 550 U.S. at 421.

100. *Hearing Components, Inc. v. Shure, Inc.*, 600 F.3d 1357, 1374 (Fed. Cir. 2010) (emphasis added).

101. *Bayer Schering Pharma AG v. Barr Labs., Inc.*, 575 F.3d 1341, 1347 (Fed. Cir. 2009).

102. *Id.*

103. *Id.* (quoting *KSR*, 550 U.S. at 421).

104. *See* 603 F.3d 1325 (Fed. Cir. 2010).

105. *Id.* at 1327.

106. *Id.*

107. *Id.*

gions. In particular, it taught that rearward sweep in the outer region of the blade would reduce shockwaves.¹⁰⁸ The patent at issue claimed a forward sweep angle in the outer region of the blade.¹⁰⁹

The Federal Circuit rejected the defendant's obvious-to-try argument because there existed a "broad selection of choices for further investigation"—namely "any degree of sweep."¹¹⁰ Moreover, "the record d[id] not show that one of ordinary skill in the art would have any reason to try forward sweep in the outer region at all."¹¹¹

That mode of analysis, however, appears to have unduly constrained the application of the obvious-to-try doctrine by failing to define correctly the limited number of known options at issue. Indeed, as the Federal Circuit observed, there are many possible angles of sweep.¹¹² But neither the claimed invention nor the prior art was so specific. Both discussed rearward and forward sweep generally, not a specific angle of either. Thus, in terms of the invention claimed in the patent, the available options were finite and few: sweep could vary in three regions (the outer, inner, and intermediate) and in two directions (rearward and forward). Further, there was a known problem in the field: the inefficiency and noise caused by shockwaves. Under the obvious-to-try test as enunciated in *KSR*, the general design needs and market pressures to solve that problem should have sufficed even if there was no specific reason in the prior art to try the specific option of forward sweep in the outer region.

C. OBVIOUSNESS AS A QUESTION OF LAW

It can also be argued that the Federal Circuit has not yet implemented a significant procedural implication of the *KSR* decision. *KSR* reiterated that "[t]he ultimate judgment of obviousness is a legal determination."¹¹³ Yet Federal Circuit precedent has undermined the legal nature of the obviousness inquiry in two ways: (1) by treating the reason to combine as a factual question, and (2) by validating the practice of submitting the ultimate issue of obviousness to juries and then simply inferring that all necessary factual findings to support the jury's verdict were made. On both of these points, the Federal Circuit has adhered to precedent predating *KSR*. Although *KSR* did not expressly address or reject these practices, its analysis and reiteration of the need to treat obviousness as a question of law undermines the foundation upon which they originally rested.

1. Treating the Reason to Combine as a Question of Fact

In *KSR*, the Supreme Court stated that when "the content of the prior art, the scope of the patent claim, and the level of ordinary skill in the art

108. *Id.* at 1329.

109. *Id.* at 1338–39.

110. *Id.* at 1339.

111. *Id.*

112. *Id.* at 1327 ("The sweep angle measures the degree of sweep in a blade.").

113. *KSR Int'l Co. v. Teleflex Inc.*, 50 U.S. 398, 427 (2007).

are not in material dispute, and the obviousness of the claim is apparent in light of these factors, summary judgment is appropriate.”¹¹⁴ In holding that obviousness is a question of law for the court, *KSR* further stressed that a court’s analysis “should be made explicit” in order “[t]o facilitate review.”¹¹⁵ Only with such explicit analysis can parties glean guidance on the question of obviousness.¹¹⁶

Prior to *KSR*, the Federal Circuit treated the existence of a teaching, suggestion, or motivation to combine prior art elements as a question of fact. It did so because it viewed the question “conceptually as a subset of the first *Graham* factor, the scope and content of the prior art.”¹¹⁷ According to the Federal Circuit, “*KSR* did not change this rule.”¹¹⁸ Consequently, “[w]hat a particular reference discloses is a question of fact, as is the question of whether there was a reason to combine certain references.”¹¹⁹

In treating the existence of a reason to combine as a factual question, the Federal Circuit arguably fails to give full effect to *KSR*, which (along with *Graham*) after all, set out the following factual questions that if disputed give rise to a need for a factfinder to resolve the dispute: “the scope and content of the prior art”; “differences between the prior art and the claims at issue”; “the level of ordinary skill in the pertinent art”; and “[s]uch secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc.”¹²⁰ Beyond that, *KSR* confirms that the “ultimate judgment of obviousness is a legal determination.”¹²¹ But the Federal Circuit has effectively added another—and frequently dispositive—“fact” issue to the list, therefore drastically limiting the number of cases in which obviousness can be resolved by the court as a matter of law.

The Federal Circuit’s rationale for doing so is difficult to reconcile with *KSR*. Considering the reason to combine as a subset of the scope and content of the prior art makes some sense under a rigid TSM test where the reason to combine *must* be located in the prior art. But when the reason to combine can come from such general notions as common sense, ordinary creativity, design trends, and market forces, it bears little resemblance to the sort of factual inquiry fit for a jury or for the court as factfinder.

Note the consequence when the Federal Circuit both requires a reason to combine and treats the question as one of fact: it essentially transforms the ultimate legal question of obviousness into a question of fact, with the

114. *Id.*

115. *Id.* at 418.

116. *See id.* at 417–18 (“Following these principles may be more difficult in other cases than it is here To facilitate review, this analysis should be made explicit.”).

117. *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351 (Fed. Cir. 2001).

118. *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1239 (Fed. Cir. 2010).

119. *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc.*, 617 F.3d 1296, 1303 (Fed. Cir. 2010).

120. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

121. *KSR*, 550 U.S. at 427.

jury resolving the dispositive issue in most cases. In effect, this approach hands the determination of obviousness to the jury, substantially undermining the Supreme Court's insistence in *KSR* on treating obviousness as a question of law. Under current law, the Federal Circuit must reverse a district court's grant of summary judgment on obviousness whenever there is "a genuine issue of material fact as to whether there was motivation to combine."¹²² Likewise, when reviewing a motion for judgment as a matter of law, the Federal Circuit defers to a jury's finding of a motive to combine or lack thereof.¹²³ The net result is that the influence of juries over the obviousness question is greatly enhanced and the influence of the Federal Circuit is greatly restricted—compared to what appears to have been the Supreme Court's vision of the proper role of courts in analyzing and resolving questions of obviousness.

2. *Inferring Factual Findings from General Jury Verdicts*

The Federal Circuit has also adhered to its pre-*KSR* practice of permitting district courts to submit the ultimate question of obviousness to juries and then deferring to any assumed factual findings that would tend to support the verdict, as long as the jury *could* have made such a finding. Indeed, the Federal Circuit has held that the ultimate question of obviousness may be submitted to the jury even when one party objects, thereby depriving litigants of the ability to obtain the *de novo* judicial determination of obviousness that *KSR* contemplates.¹²⁴ In the court's view, "'since the answer to the legal question necessarily resolves any disputed underlying factual issue,' the court must accept implicit factual findings upon which the legal conclusion is based when they are supported by substantial evidence."¹²⁵ Thus, from a general verdict of non-obviousness, a court will "infer that the jury found [the patentee's] experts to be credible and persuasive";¹²⁶ "assume that, in light of the jury's verdict, it adopted the lower level of skill";¹²⁷ and "assume that it determined there was no reason to combine the prior art references."¹²⁸

Of course, these are simply legal fictions; unless the jury has been explicitly asked each of these questions in the form of special interrogatories, there is no way to be certain what factual issues it has resolved. Ironically, the only certainty provided by a general jury verdict on obviousness is that the jury has resolved an ultimate question of law one way or the other—an issue as to which the jury is most assuredly *not* entitled

122. *Commonwealth Scientific & Indus. Research Org. v. Buffalo Tech., Inc. (USA)*, 542 F.3d 1363, 1378 (Fed. Cir. 2008).

123. *See, e.g., Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1367 (Fed. Cir. 2012); *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 846 (Fed. Cir. 2010).

124. *See Kinetic Concepts*, 688 F.3d at 1353 ("[T]he district court denied S & N's request that it not submit the ultimate question of obviousness to the jury.").

125. *Id.* at 1359 (quoting *Quaker City Gear Works, Inc. v. Skil Corp.*, 747 F.2d 1446, 1453 (Fed. Cir. 1984)).

126. *Id.* at 1362.

127. *Id.* at 1366.

128. *Id.* at 1367.

to deference. Whatever may have been the case under the pre-*KSR* rigid TSM test, the flexible inquiry contemplated by *KSR* is ill-suited to the deferential approach still being employed by the Federal Circuit. Under a properly flexible inquiry, many possible mixes of factual findings could produce a jury verdict. The jury, for instance, may have agreed with the defendant on the level of ordinary skill, but agreed with the plaintiff about the degree of difference between the claims and the prior art. Or it may have agreed with the plaintiff on the content and scope of the prior art, but found that secondary considerations warranted a verdict for the defendant. Blindly assuming that the jury made all possible findings in support of its verdict renders the Federal Circuit incapable of performing its role of rigorously policing and defining the contours of the law of obviousness.

Moreover, jury instructions vary.¹²⁹ One version of the model instruction for obviousness in the Northern District of California states that “[t]here is no single way to define the line between true inventiveness on the one hand (which is patentable) and the application of common sense and ordinary skill to solve a problem on the other hand (which is not patentable).”¹³⁰ It goes on to provide that “you *may* consider whether [the alleged infringer] has identified a reason that would have prompted a person of ordinary skill to combine the elements or concepts from the prior art in the same way as the claimed invention.”¹³¹ Is there any basis to infer that a jury that returns a verdict of obviousness after receiving such instructions necessarily found a reason to combine? To assume that general jury verdicts on the ultimate question of obviousness necessarily embody particular factual findings systematically overstates the scope of the jury verdict and inappropriately constrains the role of the courts in answering what is supposed to be a question of law.

The inevitable result skews judicial review of jury obviousness determinations in favor of affirmance. At a minimum, the Federal Circuit’s practice of deferring to assumed jury findings has transferred primary responsibility for determining obviousness to juries and has effectively transformed *de novo* review of obviousness questions into something more deferential. This transfer blunts the notion that obviousness is a question of law for the court. The point is particularly pronounced when the Federal Circuit requires a motivation to combine. In *i4i Limited Partnership v. Microsoft Corp.*, for example, the Federal Circuit concluded that “[t]he jury found all of the asserted claims not invalid, meaning the jury must have believed that there were differences between the prior art and asserted claims, and that a person of ordinary skill would not have been motivated to combine the references.”¹³² As a practical matter, whether or not the claimed invention was obvious turned on neither a

129. *R.R. Dynamics, Inc. v. A. Stucki Co.*, 727 F.2d 1506, 1515–16 (Fed. Cir. 1984).

130. Northern District of California Model Patent Jury Instructions, *supra* note 89, at 37.

131. *Id.* (emphasis added).

132. 598 F.3d 831, 846 (Fed. Cir. 2010).

legal determination by the court nor on an express factual finding by the jury, but on an assumed finding that the jury may or may not have made.

This transfer of authority from judge to jury disables meaningful judicial review, which in turn undermines the very uniformity and predictability that the Federal Circuit was created to achieve and has long sought to foster. Congress vested the Federal Circuit with exclusive appellate jurisdiction over patent cases precisely “for the sake of such desirable uniformity.”¹³³ But when the Federal Circuit cedes that jurisdiction by deferring to general jury verdicts on the question of obviousness, it deserves uniformity and undermines the coherent development and careful explication of the law. Therefore, the promise of *KSR* has yet to be fully realized in this respect as well.

IV. CONCLUSION

To its credit, the Federal Circuit has done much to implement and enforce *KSR*’s modifications to the law of obviousness. But in a few respects, the court still clings to the vestiges of its pre-*KSR* case-law to a greater extent than *KSR* seems to require. In particular, by sometimes requiring application of its flexible TSM test, engrafting its flexible TSM test onto the distinct obvious-to-try doctrine, treating the existence of a reason to combine as a factual question, and allowing submission of the ultimate question of obviousness to juries and then deferring to assumed factual findings that would support the verdict, the Federal Circuit has fallen short of a full-fledged adoption of *KSR*’s reasoning and implications.

As discussed, some observers have commented on a clash of cultures between the Supreme Court, which deals with “majestic cases” and “balances . . . grand principles,” and the Federal Circuit, which resolves run-of-the-mill commercial disputes where “predictable . . . [b]right line rule[s]” are desirable to guide parties.¹³⁴ But it is open to question whether the divergences from *KSR* that are discussed above can be explained by that theory. It is far from clear that the flexible TSM test as now applied by the Federal Circuit offers predictability or clear guidance. The court’s endorsement of general jury verdicts and deference to assumed factual findings turns obviousness disputes over to lay juries, which are predictable only in the sense that they tend on average to err in favor of patentees.¹³⁵ Substantive flexibility coupled with rigorous appellate review by the Federal Circuit would do more to advance the goals of uniformity and predictability in the long run.

133. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390 (1996).

134. Quinn, *supra* note 4.

135. See Kimberly A. Moore, *Juries, Patent Cases, & A Lack of Transparency*, 39 Hous. L. Rev. 779, 780 (2002) (“[J]uries are more likely than judges to find for the patent holder and more likely to hold a patent valid, infringed, and willfully infringed.”); Amy Tindell, *Toward a More Reliable Fact-Finder in Patent Litigation*, 13 Marq. Intell. Prop. L. Rev. 309, 320 (2009) (“[A]n outcome of validity is significantly more likely with a jury.”).

Nor is it apparent that a general aversion to formalism fueled the decision in *KSR*. Certainly it cannot be said that all of the Justices who joined the *KSR* decision share a dislike for bright-line rules.¹³⁶ It seems at least equally possible that other concerns motivated at least some of the Justices, including, in particular, a desire to avoid the costs associated with overprotection of patent rights. As Justice Kennedy explained for the Court, "Granting patent protection to advances that would occur in the ordinary course without real innovation retards progress."¹³⁷ When it comes to the issue of obviousness, correct outcomes may be more important than the certainty gained by "imperfect generalizations"¹³⁸—especially when those generalizations tip the balance in favor of patent protection for non-innovative inventions.

Fundamentally, however, our examination of the Federal Circuit's reaction to the *KSR* decision reveals a court laboring in good faith to implement the dictates of that ruling, regardless of possibly differing perspectives regarding the proper balance between bright-line rules and judicial flexibility. While it is sometimes tempting to frame the Federal Circuit's relationship with the Supreme Court as a strained or difficult one, this case study suggests that the reality is much more mundane. The Supreme Court has provided guidance regarding certain patent law doctrines, just as it does in numerous other areas of federal law, and the Federal Circuit is in the process of working out the details of that guidance. Indeed, far from suggesting a lack of confidence in the Federal Circuit's willingness to implement its pronouncements, the thrust of the *KSR* decision was to increase the role and flexibility of the Federal Circuit in enunciating the contours of the law of obviousness, thereby demonstrating the Supreme Court's trust and expectation that the Federal Circuit will generally exercise that flexibility appropriately. In its implementation of the *KSR* decision, the Federal Circuit has done much to show that the Court's trust is warranted. But there is still more work to be done.

136. See *Scalia*, *supra* note 64, at 1173.

137. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007).

138. *Scalia*, *supra* note 64, at 1177.